

AMENDED CLAIMS

[Received by the International Bureau on 28 December 2004 (28.12.04) ;
original claims 1-4 replaced by amended claims 1-2]

+ STATEMENT

Amended Claims

1. Any wave power plant that has at least two paddles in series and its working principle is to produce the optimum energy from the waves at any time even at a tide time by paddles pivotal forward and backward motions (see Fig 6) and by paddles plates 4 vertical motions that are changed according to the energy received of a plant's component (hereinafter: "Energy"), to find the optimum plate's position Z that the optimum number of wave's particles P will hit the paddle's plate 4 for receiving the optimum amount of energy from the wave (see Fig 7), said plant comprising the frame 5 with the legs 6 carrying at least two paddle units that are arranged in series and movable accordingly by progressive waves, said paddle units accept and consume the waves' energy successfully, while each one of the said paddle units comprising a rod 3 and a plate 4 that is secured on the frame, with the possibility for pivoting with respect thereof by dedicated transfer means for converting forward and backward pivoting motion of the paddle unit into energy, said transfer means comprising at least one any crankshaft mechanisms mounted on the upper frame 5 with the possibility of being driven by the rod 3, said crankshaft mechanisms causing that both, in forward paddle pivotal motion the paddle's energy is accepted and consumed through at least one accumulator AC1 and also in backward paddle pivotal motions the paddle's energy is accepted and consumed through at least one accumulator AC2, said plate 4 vertical motions are done by a pump or by the hydraulic motor HM or by another kind of motor (hereinafter: "Motor") with a piston or the cable 22 (hereinafter: "Cable") that take the plate 4 up and down, directly or indirectly, according to the Energy, said Energy is known by a control system that reads any energy factor/s, before or in or after, the accumulators AC1 and/or AC2.

2. The plant as defined in claim 1, in which the paddle's plate 4 vertical motions are done by the Motor and the Cable that take the plate 4 up and down directly or indirectly, said directly is done while the Motor and the Cable are for the use of paddle's rod 3 to take the plate 4 up and down, then the main rod 3 is built from at least two sub-rods 3a and 3b and the rod 3 works as a "Telescope" (hereinafter: "Telescope working principle") and the Cable 22 inside the rod 3 takes the plate 4 up and down in vertical motion according to the Energy, said indirectly is done while the "Telescope" working principle, the Motor and the Cable are for the use of the legs 6, then each one of the legs 6 are build from few parts, the same, as the above mentioned sub-rods 3a and 3b, that each one of the legs 6 works as a "Telescope" and all the legs 6 work together as a "Telescope" to take the frame with the paddles, 3+4, up and down in vertical motion according to the Energy.

Statements Under Article 19(1)" (Rule 46.4)

The amended claim 1 is edited from the old claim 1 and the part of the old claim 3, with the subject of finding the optimum plate's position Z. The claim was amended for the following seven objectives:

1. The basic protection of the claim is from the words in claim's beginning: "Any wave power plant", to the words in the 7th line: "(see Fig 7)". The rest of the claim describes the claim's protection in details.
2. Showing the claim inventing step, with the solution of the plant working principle to the problem as described in the claim's beginning: "to produce the optimum energy from the waves at any time even at a tide time". The claim basic solution is written from the words in 3rd line: "by paddles" until the words in the 7th line: "(see Fig 7)". This solution is the inventing step and a novelty in regards to all the rest of the inventions and in particular to each one of the following inventions: WO02/07747A, US4490621 and JP53006750A.
3. Showing the plant industrial application is from the words in the 7th line: "said plant" to the words in the 18th line: "accumulator AC2", with the industrial application of the plate 4 vertical motion that is written from the words in the 18th line: "said plate" to the words in the last line: "AC1 and/or AC2".
4. Showing that this invention receives the wave's energy by finding the optimum plate position Z, to receive the energy from the entire wave, from the wave's part below sea level plus the wave's part above sea level (see Fig 7). The JP53006750A receives energy from a wave that hits the float 1, so JP53006750A receives energy only from the half of the wave (the wave's height is described as the distance from the wave's top above the sea level to the wave's bottom below the sea level). JP53006750A doesn't receive any energy from the wave's part below the sea level. This invention receives much more energy and better than JP53006750A.
5. Showing that this invention uses at least one crankshaft mechanism, while WO02/07747A uses only one crankshaft mechanism. These two options, from the engineering solution point of view, are the same, according to the written opinion clause 3.3, but the claim in this invention gives more possibilities to build the plant in the most convenient way.
6. The energy in this invention is accepted and consumed through the accumulators AC1 and AC2 as described in the in the claim but the energy in WO02/07747A, according to its claim 1, is accepted and consumed through hydraulic motor without the possibility of using accumulators. Since the time between two waves are not equal all the time (even if the waves height are equals), and the paddles are located between two waves, a wave power plant must use accumulators to cover few seconds, for the above mentioned time's different. This claim shows the advantage of using accumulators towards claim 1 of WO02/07747A.
7. This invention uses at least two accumulators for at least two paddles in series while US4490621 uses one accumulator for only one paddle. The energy produce by this invention is much more higher than the energy of US4490621.
The old claim 2 was canceled.

The amended claim 2 is edited from the old claims 3 and 4 with additional technical specifications. The claim was amended for the following objective:

1. Showing the claim inventing step, which is the two solutions of taking up and down the plate 4, directly or indirectly, by the Motor and the Cable according to the Energy. The directly solution is written from words in the claim, 3rd line: "said directly" until the words in the claim, 7th line: "the Energy". The indirectly solution is written from the words in the claim, 7th line: "said indirectly" to the end of the claim.

Both from the point of view of the present invention operation principle and from the point of view of its particular structure, the inventions: WO02/07747A, US4490621 and JP53006750A energy converts are not similar to the present invention.

The instructions amended cited in the search report comprises a combination of the features as defined in the amended claims and therefore the applicant respectfully requests reconsideration of the characterization of the references during chapter II examination.